

Work Order ID 71829

Wednesday, July 13, 2011 8:38:01 AM

Page 1

Item ID: D2940-1

Accept

Revision ID: U/R

Item Name: Support

Start Date: 7/14/2011 Start Qty: 10.00

Required Date: 7/28/2011 Req'd Qty: 10.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: MF Date: 11-07-13

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2940

Rev B U/R

100



HAAS I

HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

Memo

1- Machine as per Folio FA079 □2- Tumble & Deburr

0.00

0.00

110



QC

Quality Control

QC1- Inspect dimensions to dimension sheet

Memo

0.00

0.00

120



QC

Quality Control

QC8- Inspect parts - second check

Memo

0.00

0.00


OK d 11.07.15 Rev.C 12.09.19
B.A 12/09/10

B.A 12/09/10

SL 12-09-12

10

10

W/O: 71829		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
11.05.15	130	No FINISH. Scotch weld per D2940 Rev. C Q 12/9/19				 11.07.15 PS1042	

Part No: D2940-1 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____






NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



NOTE: Date & initial all entries




Work Order ID 71829

Wednesday, July 13, 2011 8:38:02 AM

Page 2

Item ID: D2940-1	Accept		Setup	Start	
Revision ID: U/R					
Item Name: Support				Stop	
Start Date: 7/14/2011	Start Qty: 10.00		Cust Item ID:		
Required Date: 7/28/2011	Req'd Qty: 10.00		Customer:		
Reference:					

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  Powdercoat Powder Coating	White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel Memo *****Mask Inside Surface as per Dwg D2940***** TIME: <input type="checkbox"/> START TIME: <input type="checkbox"/> FINISH TIME: <input type="checkbox"/> OVEN TEMPERATURE: <input type="checkbox"/>	0.00 0.00							
			NO FINISH <i>AP 11.07.15</i>						
140  QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							
			N/A						
150  SprayPaint Spray Painting	SprayPaint Memo Prime inside surface as per Dwg D2940 and QSI 005 4.3. <i>Scotch weld 22lb B/A per D2940 Rev. C.</i>	0.00 0.00							
								<i>AB</i>	<i>12-9-19</i>

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

Work Order ID 71829

Wednesday, July 13, 2011 8:38:02 AM



Page 3

Item ID: D2940-1

Accept



Setup Start



Revision ID: U/R

Stop



Item Name: Support

Start Date: 7/14/2011 Start Qty: 10.00



Cust Item ID:

Required Date: 7/28/2011 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 	QC14 Inspect Spray Paint QC3	0.00							
QC Quality Control	Memo	0.00				10			12-09-21
170 	Identify as per dwg & Stock Location: X-tube ASS'N	0.00							
Packaging Packaging	Memo	0.00				10			12-09-21
180 	QC21- Final Inspection - Work Order Release	0.00							
QC Quality Control	Memo	0.00							12/9/24

MF
12-09-21

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR: Yes No** **DQA:** _____ **Date:** _____
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, July 13, 2011 8:37:58 AM

Page 1

Work Order ID: 71829

Parent Item: D2940-1

Parent Item Name: Support



Start Date: 7/14/2011

Required Date: 7/28/2011

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP C 02.11.26 Reformat; Added P/O KJ
IPP Rev:D Added priming as per Rev B 07-04-30 JLM
IPP E 08.03.19 Re-format Ec verified by DD
IPP Rev:F 08-10-22 add qc14 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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DSK081

Manufactured No

110

Each

0.0000

0.5

5



D2940-1 TURNING DETAIL



B.e 12/09/10

B 69717

B 88241

4.0

~~1.0~~

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

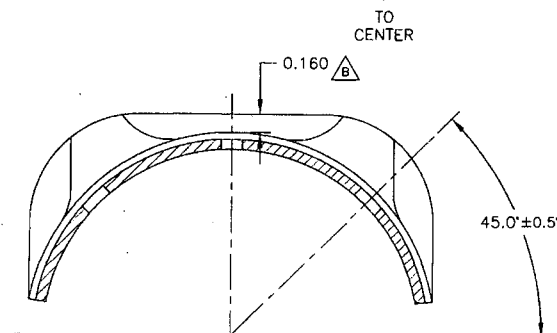
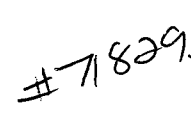
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

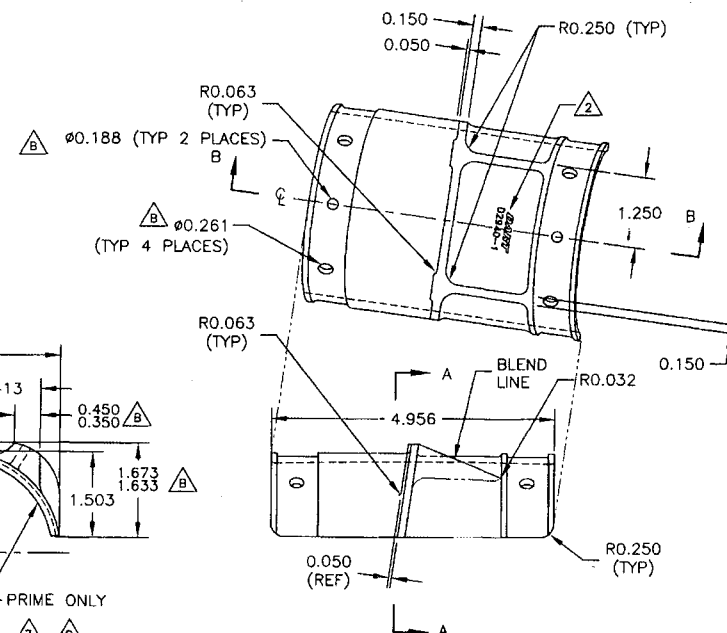
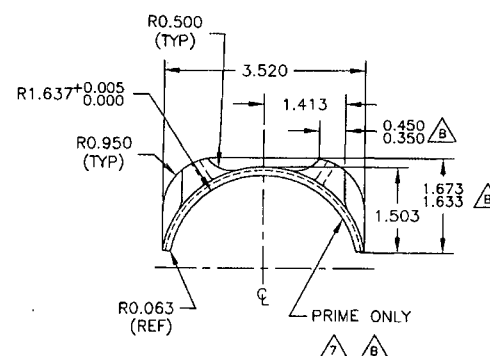
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

11.06.13








SECTION A-A
TOOLING HOLE DETAIL
SCALE 1:1



D2940-1

- 1) MATERIAL: 17-4 PH STAINLESS STEEL
HEAT TREAT TO H900 CONDITION
(900°F FOR 1 HR, AIR COOL)
MIN UTS = 170 KSI (38 HRc)
- 2) IDENTIFY WITH DART LOGO AND PART NUMBER IN THIS AREA
WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP
- 3) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) FINISH: POWDER COAT WHITE (REF 4.3.5.2) PER DART QSI 005 4.3
PRIME INSIDE SURFACE AS SHOWN PER DART QSI 005 4.2

B	07.03.16	UPDATE PER NCR 642, PRIME INSIDE	
A	01.01.10	NEW ISSUE	
DESIGN		DRAWN BY	
CHECKED		APPROVED	
DATE		TITLE	
07.03.16		03.250 SUPPORT	
		 DART AEROSPACE LTD. MARKHAM, ONTARIO, CANADA	
		REV.	
		SHEET 1 OF	
		SCALE	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	71829
Description: Ø3.250 Support		Part Number:	D2940-1
Inspection Dwg: D2940	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	0.240	0.260		0.250	0.250	.250	.250	.250
AB	0.490	0.510		0.500	0.500	.500	.500	.500
AC	0.140	0.160		0.149	0.149	.149	.149	.149
AD	3.510	3.530		3.521	3.521	3.518	3.516	3.520
AE	1.633	1.673		1.661	1.6625	1.661	1.6605	1.658
AF	1.493	1.513		1.505	1.509	1.506	1.506	1.503
AG	0.040	0.060		0.052	0.053	.053	.056	.054
AH	0.188	0.193		0.189	0.189	.190	.190	.196
AI	0.140	0.160		0.151	0.150	.147	.146	.148
AJ	2.518	2.538		2.526	2.526	2.530	2.530	2.530
AK	0.040	0.060		0.050	0.050	.050	.050	.050
AL	0.010	0.020		0.010	0.010	.010	.010	.010
AM	0.140	0.160		0.140	0.140	.140	.140	.140
AN	0.350	0.450		0.354	0.354	.355	.355	.355
AO	0.240	0.260		0.250	0.250	.250	.250	.250
AP	0.150	0.170		0.157	0.154	.154	.152	.154
AQ	0.053	0.073		0.063	0.063	.063	.063	.063
AR	101.64	105.64		103.64	103.64	103.64	103.64	103.64
AS	0.260	0.267		0.261	0.261	.262	.262	.262
AT	0.053	0.073		0.063	0.063	.063	.063	.063
AU	4.118	4.138		4.127	4.127	4.132	4.132	4.126
AV								
AW								
Accept/Reject								

Measured by:	B. 12/09/10 / <i>onh</i>	Date:	12/09/11
Audited by:	JL 12-9-12	Date:	
Prototype Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	07.05.08	Dwg Rev. updated	KJ/JLM	
C	07.07.18	Dimension AS revised	KJ/JLM	
D	08.04.22	Reformat	KJ/JLM <i>JA</i>	<i>JA</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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DART AEROSPACE LTD		Work Order:	71829
Description: Ø3.250 Support		Part Number:	D2940-1
Inspection Dwg: D2940	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	16	17	18	19	10
HAAS Section								
AA	0.240	0.260		.250	.250	.250	.250	.250
AB	0.490	0.510		.500	.500	.500	.500	.500
AC	0.140	0.160		.149	.149	.149	.149	.149
AD	3.510	3.530		3.521	3.516	3.521	3.517	3.518
AE	1.633	1.673		1.658	1.658	1.657	1.653	1.654
AF	1.493	1.513		1.501	1.499	1.5005	1.495	1.501
AG	0.040	0.060		.052	.052	.053	.052	.055
AH	0.188	0.193		.190	.190	.190	.190	.190
AI	0.140	0.160		.148	.146	.147	.149	.147
AJ	2.518	2.538		2.530	2.530	2.530	2.530	2.530
AK	0.040	0.060		.050	.050	.050	.050	.050
AL	0.010	0.020		.010	.010	.010	.010	.010
AM	0.140	0.160		.140	.140	.140	.140	.141
AN	0.350	0.450		.355	.355	.355	.355	.355
AO	0.240	0.260		.250	.250	.250	.250	.250
AP	0.150	0.170		.156	.155	.155	.152	.152
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR	101.64	105.64		103.64	103.64	103.64	103.64	103.64
AS	0.260	0.267		.260	.260	.260	.260	.260
AT	0.053	0.073		.063	.063	.063	.063	.063
AU	4.118	4.138		4.126	4.128	4.128	4.128	4.128
AV								
AW								
Accept/Reject								

Measured by: <i>CMF</i>	Date: 12/09/11
Audited by: <i>DL</i>	Date: 12-9-12
Prototype Approval:	Date:

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	07.05.08	Dwg Rev. updated	KJ/JLM	
C	07.07.18	Dimension AS revised	KJ/JLM	
D	08.04.22	Reformat	KJ/JLM	<i>[Signature]</i>

